

SUPPLEMENTAL FIGURES

Fig. S1

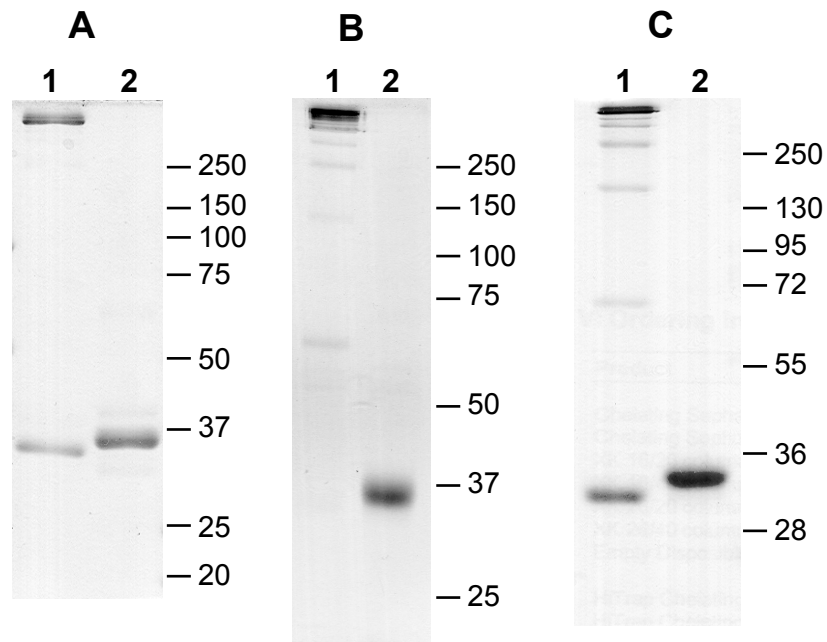


FIGURE S1. SDS-PAGE analysis of the three human ficolins. Coomassie blue staining of purified serum L-ficolin (A), recombinant H-ficolin (B) and recombinant M-ficolin (C), unreduced (lanes 1) and reduced (lanes 2). The positions of reduced standard proteins are indicated on the right sides of the gels.

Fig. S2

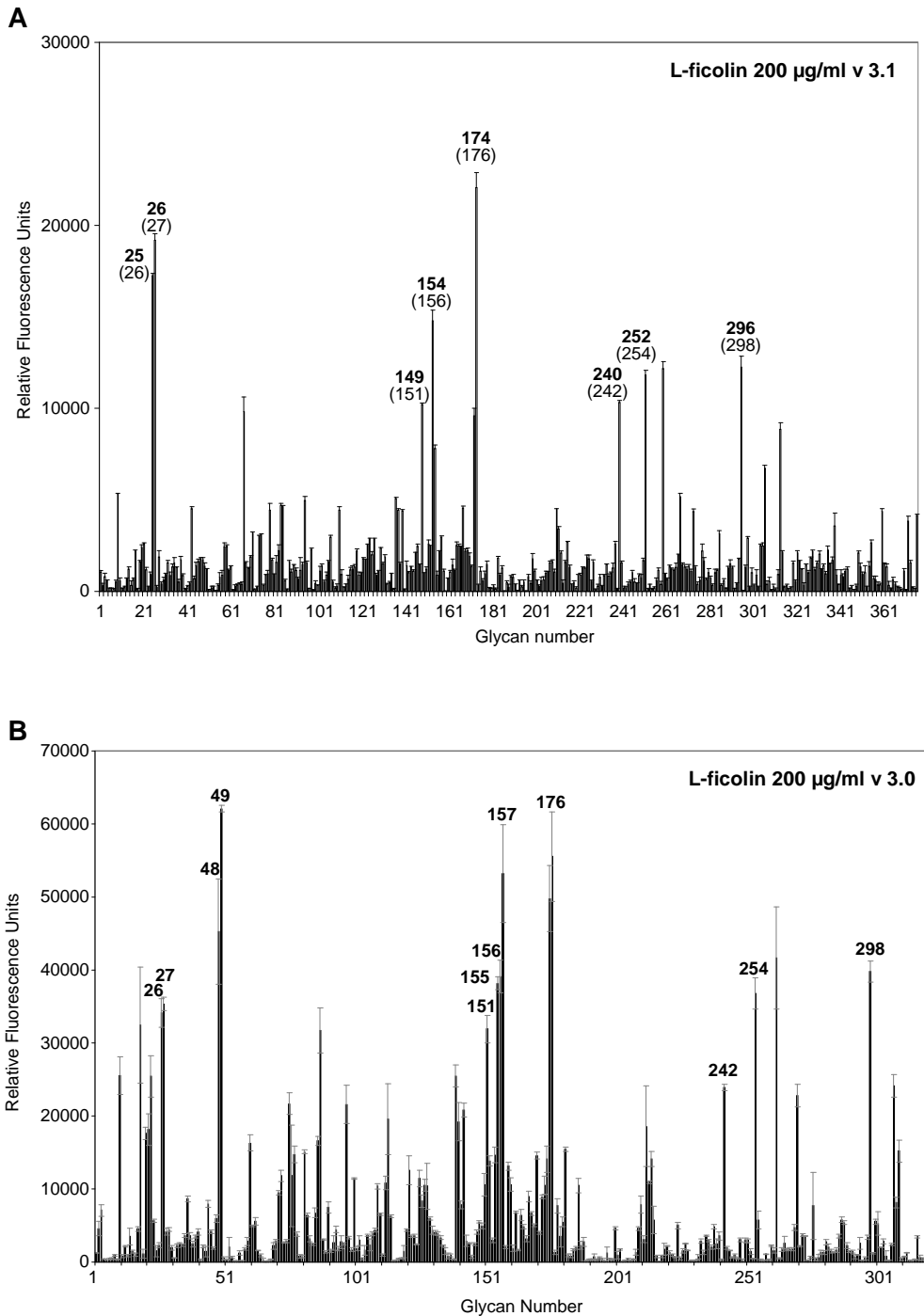


FIGURE S2. Glycan array screening of L-ficolin. Versions v3.1 (A) and v3.0 (B) of the printed array of the Consortium for Functional Glycomics were probed with L-ficolin (200 $\mu\text{g/ml}$). The glycan numbers of array version 3.0 are indicated in parentheses in (A).

Fig. S3

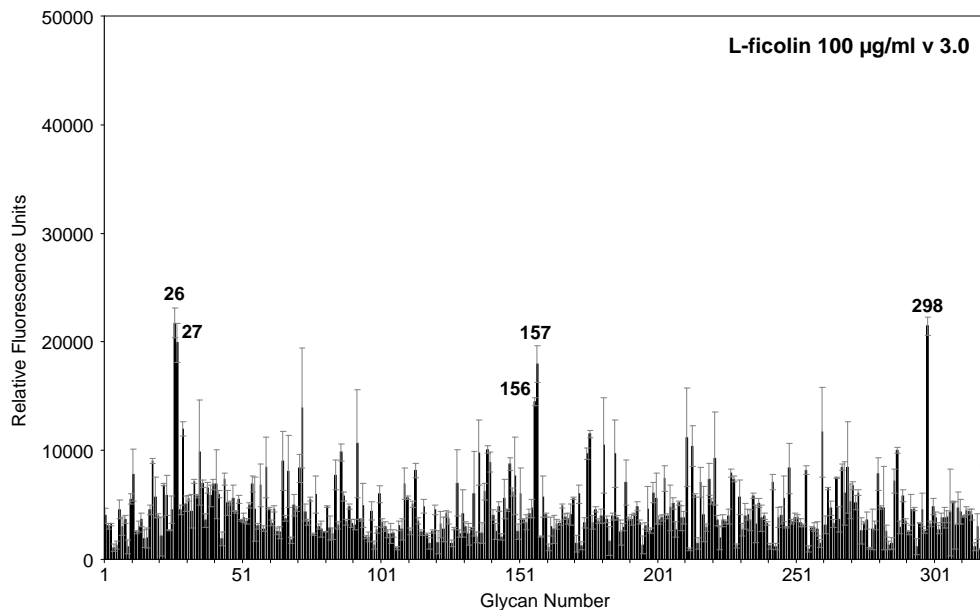


FIGURE S3. Glycan array screening of L-ficolin. Version v3.0 of the printed array of the Consortium for Functional Glycomics was probed with L- ficolin (100 µg/ml).

Fig. S4

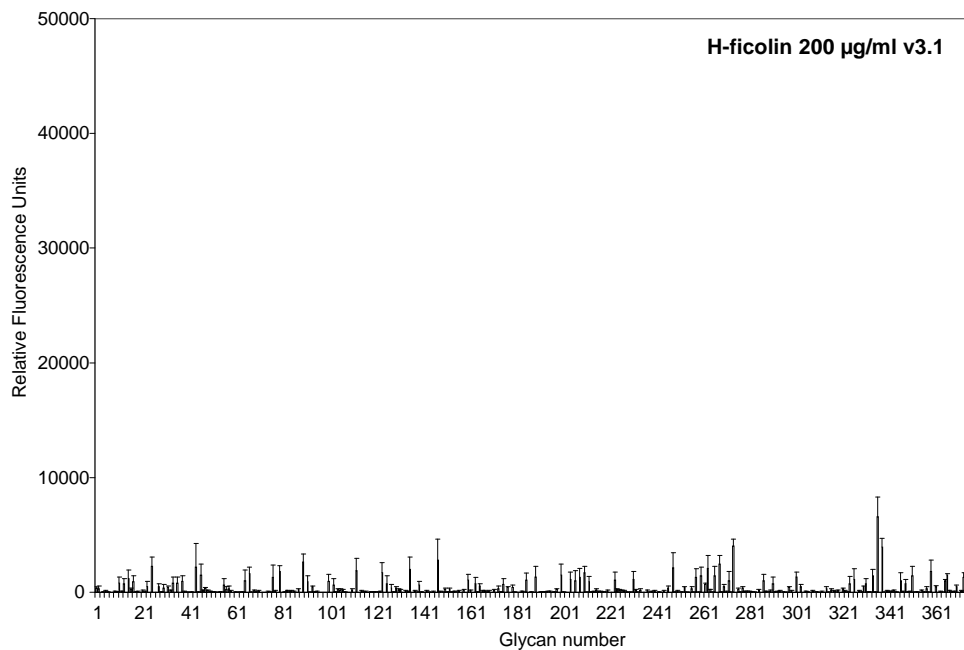


FIGURE S4. Glycan array screening of H-ficolin. Version v3.1 of the printed array of the Consortium for Functional Glycomics was probed with H- ficolin (200 µg/ml).

Fig. S5

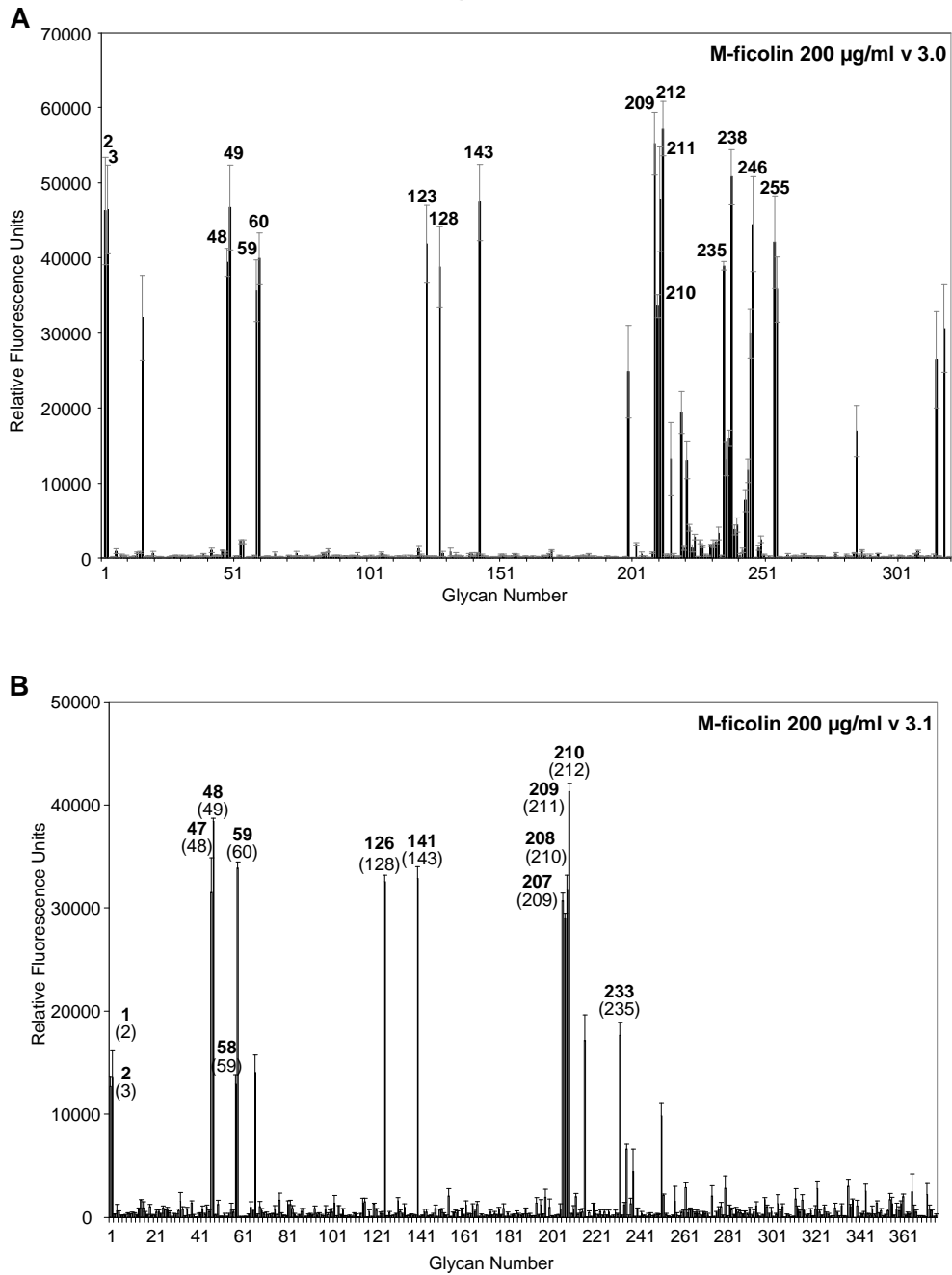


FIGURE S5. Glycan array screening of M-ficolin. Versions v3.0 (A) and v3.1 (B) of the printed array of the Consortium for Functional Glycomics were probed with M-ficolin (200 µg/ml). The glycan numbers of array version 3.0 are indicated in parentheses in (B).

Fig. S6

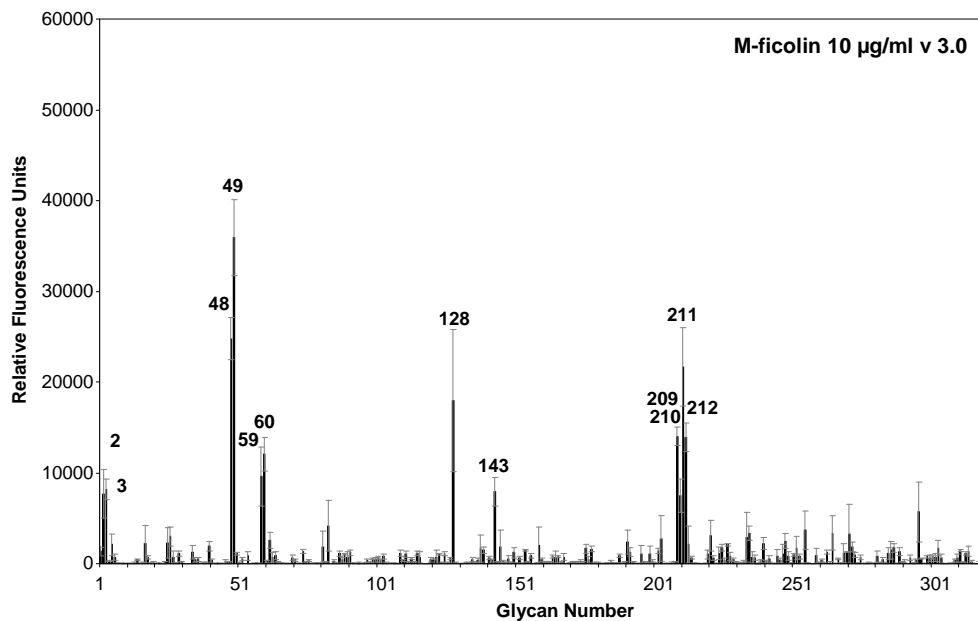


FIGURE S6. Glycan array screening of M-ficolin. Version v3.0 of the printed array of the Consortium for Functional Glycomics was probed with M- ficolin (10 µg/ml).

Fig.S7

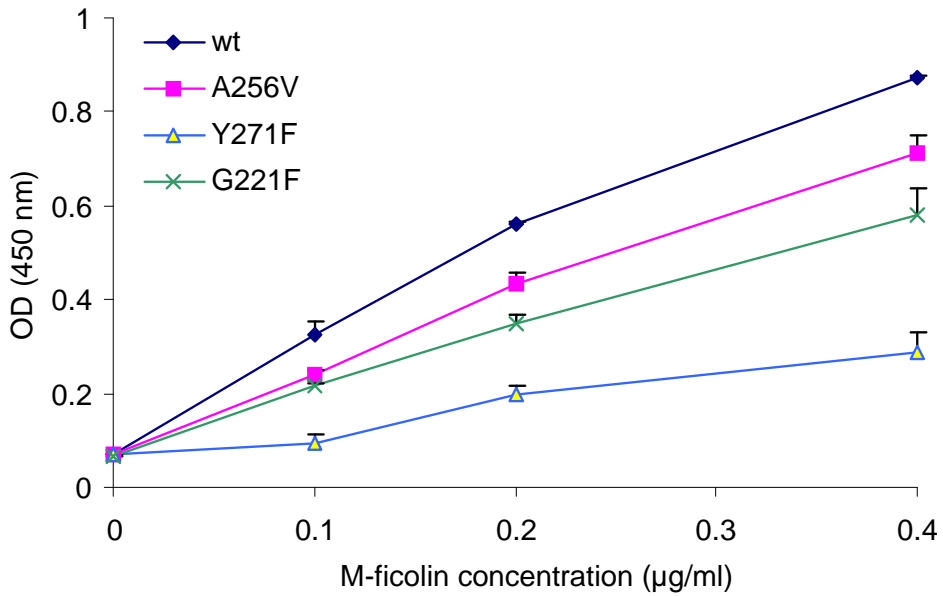


FIGURE S7. Binding of the M-ficolin variants to acetylated BSA. Acetylated BSA (0.5 µg) was coated in microtiter wells and incubated with various amounts of M-ficolin. The amount of bound protein was measured by reaction with a polyclonal rabbit anti-L-ficolin antibody that crossreacts with M-ficolin, as described under Experimental Procedures. Results are presented as means \pm SD of three independent experiments. Similar results were obtained when the M-ficolin variants were incubated in the presence of ficolin-deficient serum (1:25 dilution).

Fig. S8

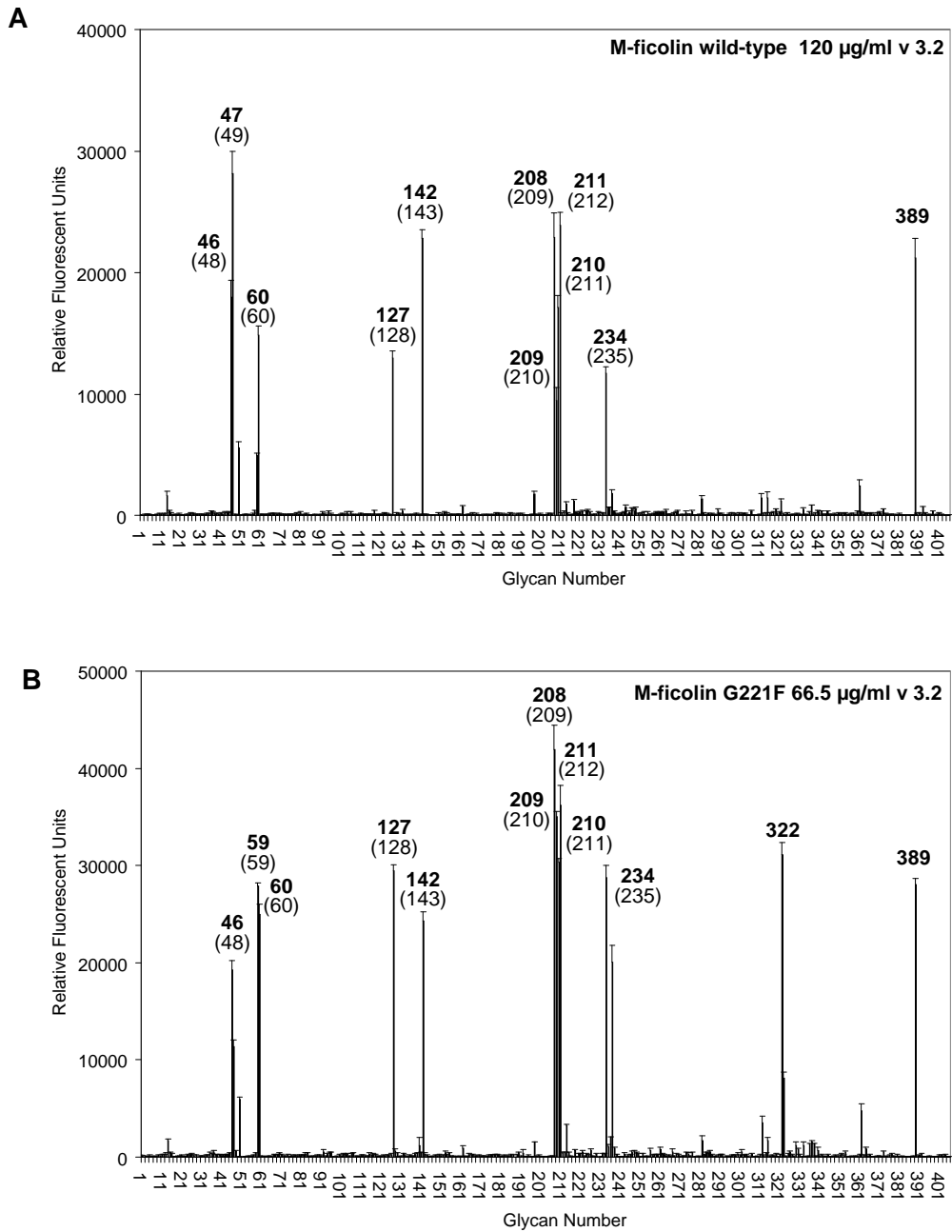


FIGURE S8. Glycan array screening of the M-ficolin variants. Version v3.2 of the printed array of the Consortium for Functional Glycomics was probed with (A) wild-type M-ficolin (120 µg/ml) and (B) the G221F mutant (66.5 µg/ml). The glycan numbers of array version 3.0 are indicated in parentheses.

Fig. S8 (continue)

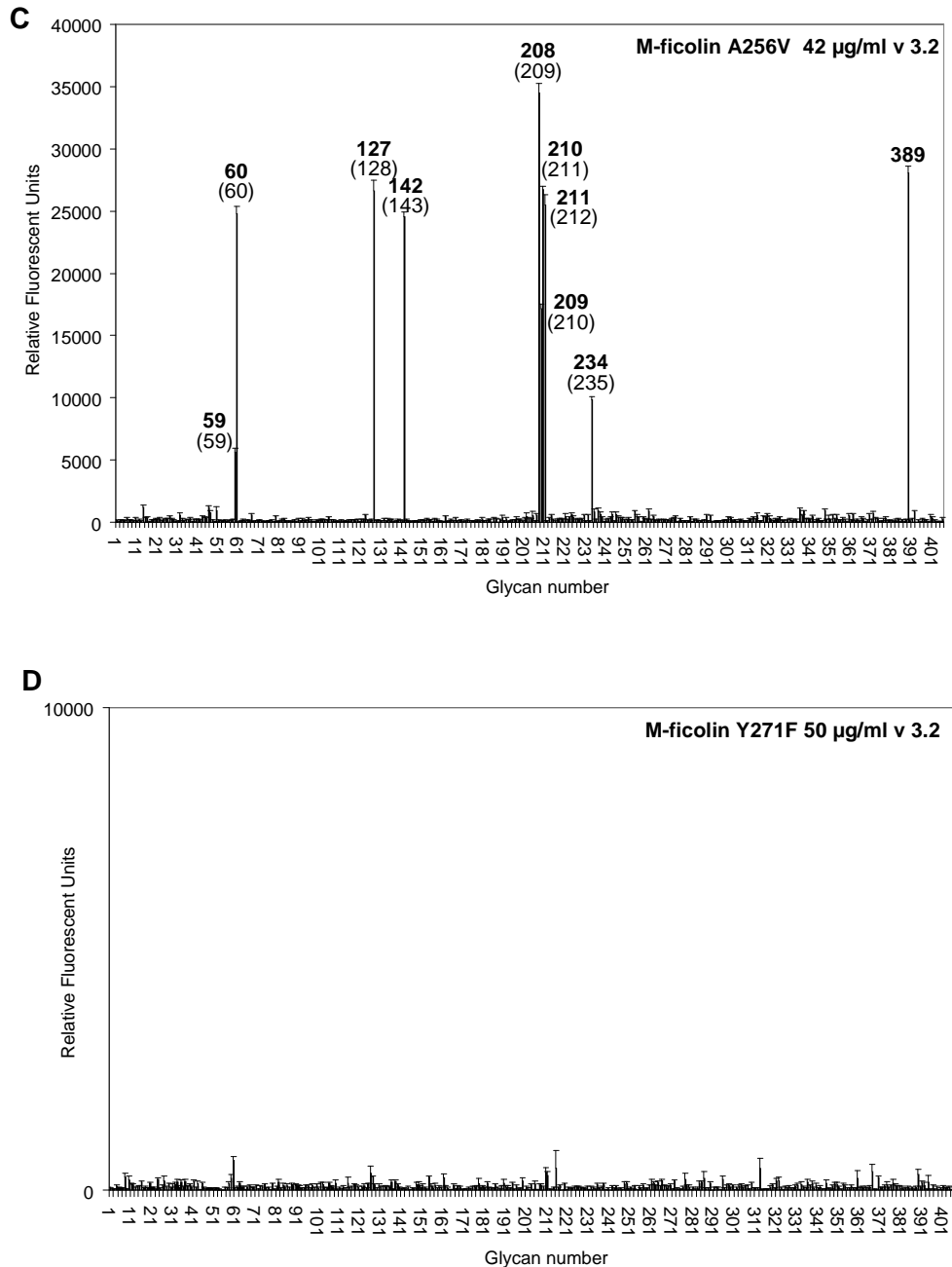


FIGURE S8. Glycan array screening of the M-ficolin variants. Version v3.2 of the printed array of the Consortium for Functional Glycomics was probed with (C) the A256V mutant (42 µg/ml) and (D) the Y271F mutant (50 µg/ml). The glycan numbers of array version 3.0 are indicated in parentheses.

Fig. S9

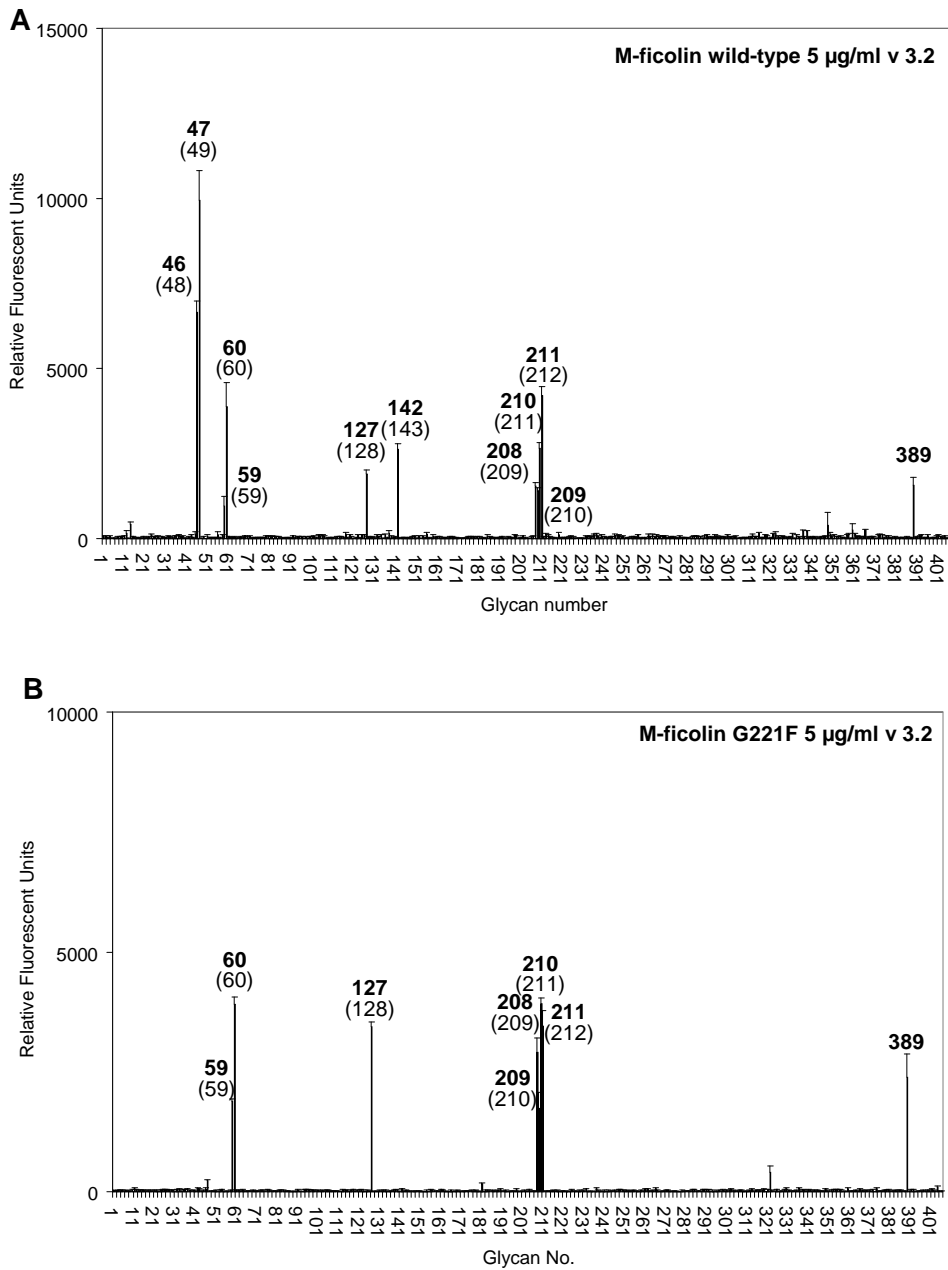


FIGURE S9. Glycan array screening of the M-ficolin variants. Version v3.2 of the printed array of the Consortium for Functional Glycomics was probed with (A) wild-type M-ficolin and (B) the G221F mutant (both at 5 $\mu\text{g/ml}$). The glycan numbers of array version 3.0 are indicated in parentheses.

Fig. S9 (continue)

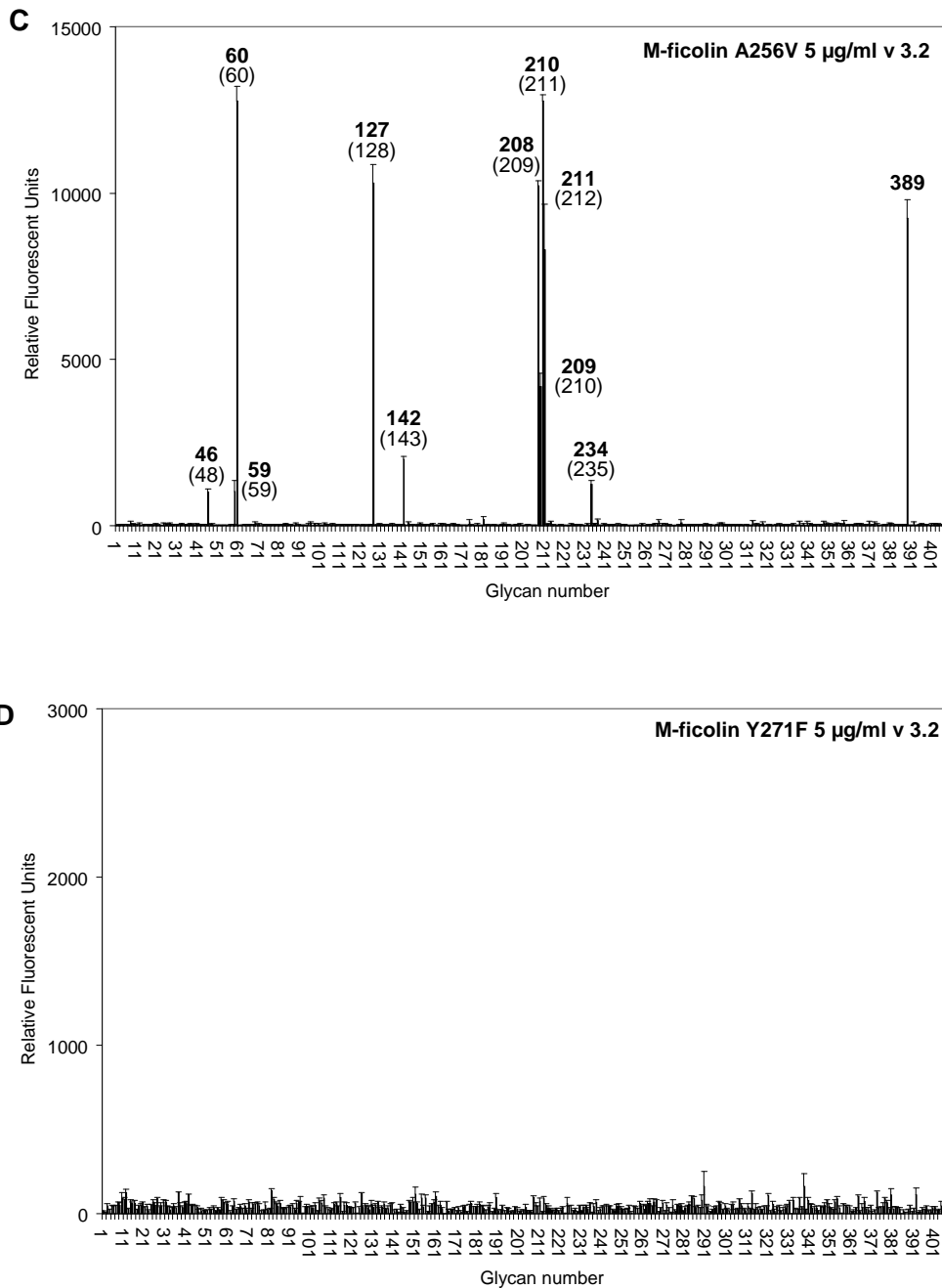


FIGURE S9. Glycan array screening of the M-ficolin variants. Version v3.2 of the printed array of the Consortium for Functional Glycomics was probed with the A256V (C) and the Y271F (D) mutants (5 $\mu\text{g/ml}$). The glycan numbers of array version 3.0 are indicated in parentheses.

Fig. S10

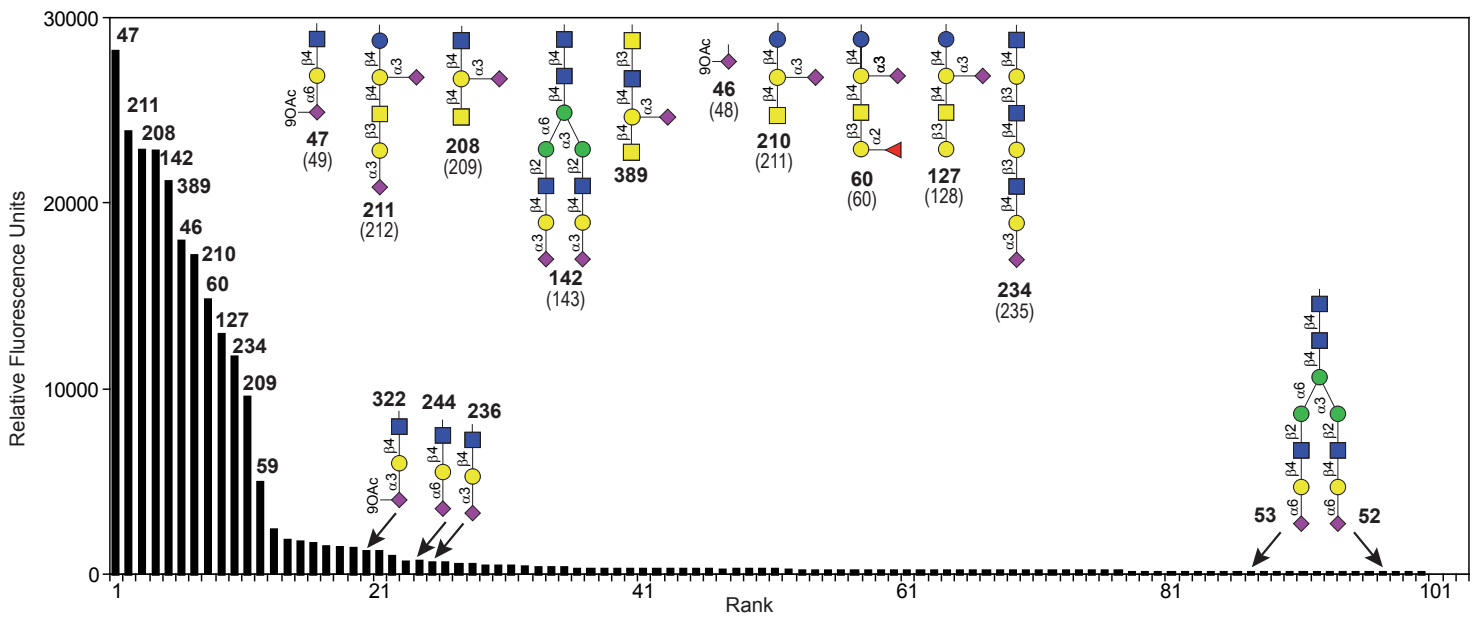


FIGURE S10. Sialic acid containing ligand binding by M-ficolin. Glycan array v3.2 data for M-ficolin (120 $\mu\text{g}/\text{ml}$) are plotted in rank order of ligand binding. The glycan numbers of array version 3.0 are indicated in parentheses.